



THE SKILLS AND TRAINING PLAN



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BC JOBS
PLAN





**BC JOBS
PLAN**

Premier's Message



When I launched *The B.C. Jobs Plan* in September 2011, I identified a skilled workforce as the foundation of a strong economy, and a key driver of B.C.'s economic growth.

Our Jobs Plan is built on three pillars:

- ▶ Working with employers and communities to enable job creation across B.C.
- ▶ Strengthening our infrastructure to get our goods to market.
- ▶ Expanding markets for B.C. products and services, particularly Asia.

It is a transformative plan. By focusing on our strengths, we are creating a new industry in liquefied natural gas, and realizing our full potential for growth in mining, technology and green technology, agriculture, transportation, forestry, tourism, and international education.

Of the one million job openings ahead, 43 per cent will need trades and technical training. This skills and training plan represents fundamental change to how we prepare British Columbians for the jobs of tomorrow. It is the result of numerous conversations with industry, with employers and with post-secondary institutions — through regional workforce tables, through sector-based tables and through one-on-one conversations at which our government listened to their needs. And it will help ensure British Columbians can take advantage of the incredible job opportunities today and in the years ahead, and help us address the rising shortage of workers.

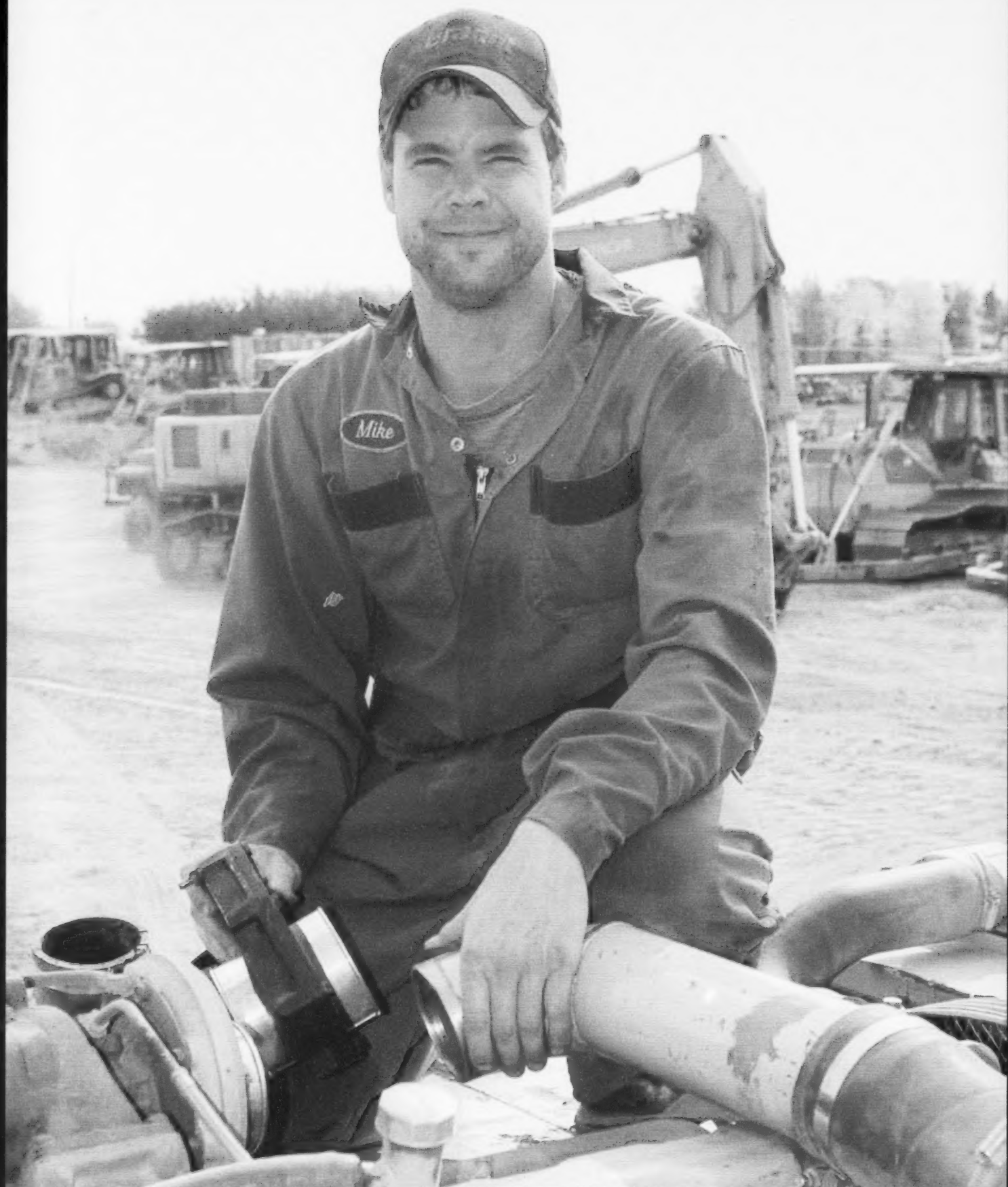
Our plan will ensure British Columbians have the information they need to guide them in their career choices, and can access training when and where they need it, using modern equipment in world-class facilities.

The B.C. Jobs plan is keeping our economy strong and stable. Despite the economic uncertainty we see all around the globe, we are the Canadian leader in jobs growth, we have the fourth-lowest unemployment rate in Canada, and our economy measured by real GDP grew by 2.9 per cent in 2011. Our triple-A credit rating was once again confirmed by major credit rating agencies earlier this year, signalling to the world that B.C. is a safe and stable place to invest.

Our government supports job creation because jobs support families. Jobs fuel our dreams and aspirations. We are reaching out to British Columbians in every corner of the province through job fairs and WorkBC Centres. We are working with businesses, post-secondary institutions, educators, and every organization that has a stake in our economy to ensure our educational programs stay relevant, effective and accessible. Join us in this work at www.bcjobsplan.ca.

A stylized, handwritten signature of Christy Clark in black ink.

Honourable Christy Clark
Premier of British Columbia



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British Columbia is leader in job creation and a safe harbour for investment. This growth in turn means changes to our economy. Last year, our government introduced the B.C. Jobs Plan to ensure our economic strength continues with measures that support new industries and sector expansion, open up new markets for B.C. exporters, support new and major developments, and ensure these developments do not face unnecessary delays.

We have been actively working with industry and small business to identify their short and long term labour and skills needs. British Columbians are highly skilled and our people are our most competitive asset. It is vital that people have the right skills for the jobs that are in demand now and into the future.

Skills and training needs are continuously evolving as new technologies and economic opportunities open up new sectors. This also means new opportunities for those just entering the workforce, students considering their career options, and people wanting to change career paths. In order to make sure training and apprenticeships are keeping pace with the changing needs of our economy, our government consulted with industry leaders and worked with educational facilities to ensure training programs are reflecting job requirements for today and tomorrow's needs.





This is not a one-time exercise.

Our collaboration with industry, education and training facilities is an ongoing commitment.

Our government is focussed on economic growth and opening up new markets and sectors so that British Columbians have greater opportunities to prosper, to launch new careers and, most importantly, to enjoy the benefits of a strong economy: a good paying job with long term success.

The B.C. Jobs Plan identifies three pillars to help us navigate today's global economic uncertainty — enabling job creation, getting goods to market, and opening and expanding markets. These pillars are supported by a consistent and focused approach to fiscal discipline, and to a comprehensive approach to education in the province, from K-12 through to post-secondary education and skills training. Our ongoing success depends on ensuring that British Columbia's workforce has the skills to take advantage of new jobs that will continue to be created as we attract business investment.

A skilled workforce is the foundation of our Jobs Plan. We know that our economic initiatives are transforming the labour market in British Columbia. Liquefied Natural Gas (LNG) is a key example.

Growing The Economy

Our government is focused on developing liquefied natural gas as a new economic sector in British Columbia and our jobs plan commits to having one LNG plant in operation by 2015 and three in operation by 2020. This is a unique opportunity that will create thousands of permanent jobs and decades of prosperity for British Columbia.

Liquefied natural gas development will spur growth in northeast B.C., where natural gas is extracted, and create jobs for engineers, rig operators, drivers, and surveyors. On the coast, where the liquefied natural gas facilities will be located, there will be demand for engineers and other professional occupations, as well as many construction trades and technicians. In Kitimat, Prince Rupert, and the surrounding areas, there will be port, energy and transportation jobs.

Between the northeast and the coast, there will be pipeline construction work. Support jobs in all types of services will be created. And in the south, a broad range of service and technical jobs will be created to support the development of upstream, pipeline and LNG projects, including jobs in environmental and engineering consulting, as well as in legal, corporate and financial services.

Over the next several years, northern British Columbia's economy will undergo a significant change as a result of investments made in liquefied natural gas. Added to this is the upswing in several large mining projects and the positive outlook for forestry and agri-foods. As this change happens, our training system will be adaptable and responsive in the trades it is teaching, providing flexibility for people so they can access the training, when and where they need it.

Economic initiatives are impacting other sectors of the economy. In 2011, more than 29,000 people were employed in mineral exploration, mining and related sectors, mostly in rural B.C. More than 10,000 job openings are expected in B.C.'s mineral exploration and mining sector by 2020. Our government is targeting technology sector employment of at least 100,000 by 2014 — in 2009, employment in this sector was at 84,000. This is consistent with the technology report card released by KPMG. KPMG also forecasts a doubling of total industry revenue in the clean technology sector.

The National Shipbuilding Procurement Strategy contract is very significant for British Columbia and will impact our labour market. Combined with other operations at SeaSpan, this multi-billion dollar contract is expected to create an annual average of 4,000 direct and indirect jobs over the life of the contract, including 2,400 jobs at the shipyards alone.

Preparing for the Future

An effective training system is not possible if pipefitting seats are open in Terrace when they are needed in Dawson Creek or if technologist seats are made available in 2015 when they are needed today. Our training system must be responsive to

Satisfaction with in-school training



Source: 2011 Apprenticeship Student Outcomes Survey (APPSO)

the needs of students and industry. That requires a close collaboration between training facilities, industry and government, and a nimble approach by all.

In September 2011, we promised to create Regional Workforce Tables as a new platform for educators, industry, employers, local chambers of commerce, First Nations, labour and others to come together to plan how best to align training programs to meet regional needs. We knew we needed their input to understand how the delivery

of regionally-based skills development programs could better address the needs of B.C.'s economy and demand for local jobs. This commitment has been met with Tables established in B.C.'s Northwest and Northeast Regions and work underway to establish an additional Table in the Kootenay Region. Their input has been vital to our understanding of where jobs are being created, and how to deliver training that meets these needs. A key outcome of the Tables will be skills training plans that align training with local industry needs and that will be delivered starting in Fall 2012.

It is projected that there will be nearly one million job openings between now and 2020 in British Columbia. Of these, 43 per cent are technical, paraprofessional and skilled occupations. It is anticipated that there will be a cumulative gap of 22,000 to 32,000 technical and trades workers in B.C. alone, if we do not take appropriate action.

Investing in Education

We have approximately 608,000 people in our K-12 education system right now, which may not be enough to meet our future workforce needs. In addition, the federal government has placed caps on economic immigration, including the Provincial Nominee Program — a program that enables the province to select immigrants that match British Columbia's labour market needs.



We have a high quality education system in B.C. at both K-12 and the post secondary level. B.C. is the home of world class universities that serve B.C., Canada and the world with exceptional learning environments, outstanding research and innovation that improves our quality of life.

Our government has made extensive investments in British Columbia's K-12, post-secondary and skills and training programs over the past decade. These investments are helping to ensure that British Columbians are best positioned and first in line to benefit from the opportunities that are being created.

This year, our government's funding to school districts is a record \$4.7 billion — a 26 per cent increase since 2000/01 despite a drop in student enrolment of more than 63,000 students. Since 2001, our government spent more than \$2.2 billion to complete 93 new and replacement schools, 150 additions, 27 renovations and 22 site acquisitions. We are pursuing a significant engagement effort with British Columbians to modernize our education system in ways that put students at the centre of learning, reflecting input from experts like the Conference Board of Canada about the skills our students need to succeed.

Our government is investing more than \$1.9 billion to support post-secondary education this year. Students in British Columbia pay just one-third of the actual costs of their education, and tuition in

B.C. is the fourth-lowest in Canada, with increases capped at two per cent annually. Over the past 10 years, we have boosted funding to operate our post-secondary institutions by 47 per cent. Since 2001/02, we have invested more than \$2.1 billion in over 1,000 capital projects to build and refurbish facilities on campuses across the province.

To encourage access and participation in post-secondary education and training, our government maintains a number of programs that provide supports to students and their families. These include disability support programs and increased weekly maximum student loan limits for students with a dependent, and a one student/one loan approach that supports students by extending lead-time for defaults, shortening the amortization period and matching federal repayment assistance. Earlier this year, we introduced a student loan repayment assistance program for low-income families and those with significant family obligations.

The recent development of an Aboriginal post-secondary vision for the future comes after more than a year of successful engagement with Aboriginal leaders, communities and students. It includes more than \$16 million this year for programs and financial assistance to help Aboriginal students succeed at their post-secondary studies.



Partnerships

Our government administers the Canada-BC labour market development agreements, which provides approximately \$346 million per year to support skill development and employment programs for eligible, unemployed British Columbians and low-skilled workers. We also administer the Targeted Initiative for Older Workers, with \$6.4 million over two years. These investments are helping British Columbians gain the skills to take advantage of job openings across the province.

In addition, government provides oversight and funds for the Industry Training Authority (ITA), with a budget of over \$100 million annually to manage industry training programs, and oversees \$7.9 million in Labour Market Partnerships to identify labour market needs in growth sectors. There are currently about 32,000 apprentices in the trades training system – more than double the number of apprentices registered when ITA was created in 2004. We have supported a 103 per cent increase in Aboriginal participation in apprenticeship training at public post-secondary institutions between 2006 and 2011. And the ITA is working with secondary and post-secondary institutions and industry to encourage and support more youth, Aboriginal people, women and immigrants to pursue a career in the trades.

The provincial government develops and provides

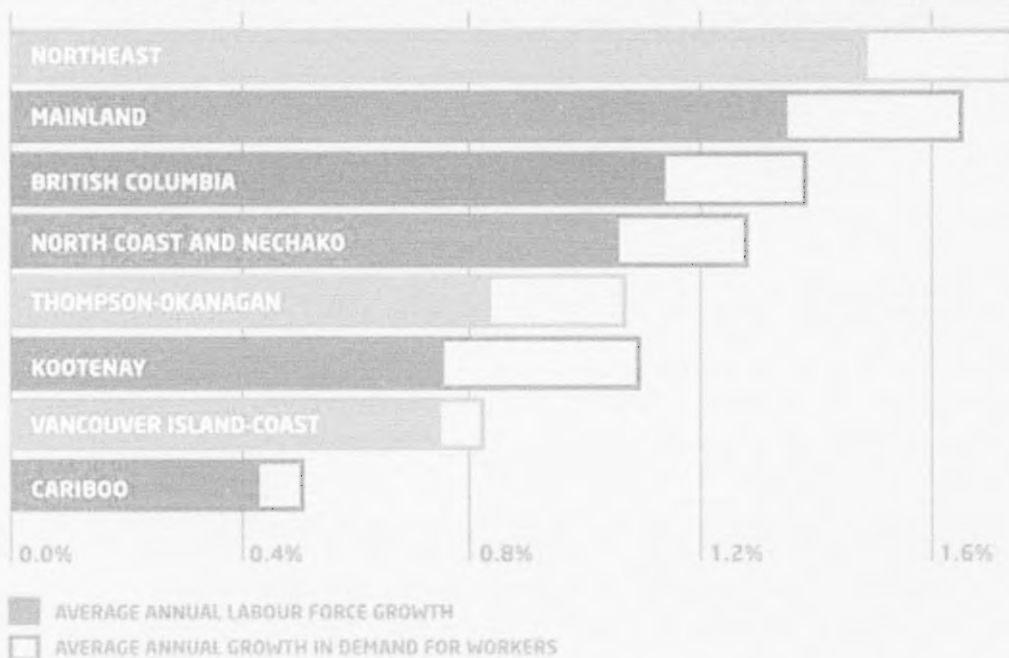
labour market information and services through B.C.'s labour market and career information portal — *WorkBC.ca*. This website empowers users to do more than find jobs – it features interactive tools, including labour market information statistics, innovative career exploration resources, and a single job search engine to access job openings across the province. These products and services are designed to assist students, parents, employers, job seekers, educators, immigrants and service providers in making more informed career, workforce and training decisions.

British Columbia's education and training system is world class. As we face the changing labour market, and a world of new opportunities opens up for British Columbians across the province, we are working with our partners to embrace new approaches that will ensure British Columbians benefit from our growing and changing economy.

To ensure we have a workforce in British Columbia that has the right skills, in the right place, at the right time, our government is moving forward with a series of new initiatives. A big part of the challenge is ensuring our system is flexible and can easily adapt to a world that is ever-changing. Over the next couple of years, the demand for workers in construction trades will be high. Then, demand is expected to shift towards trades workers required for ongoing operations. Our plan will ensure training is focused on developing apprentices who are



DEMAND FOR WORKERS WILL GROW FASTER THAN THE LABOUR FORCE IN ALL REGIONS OF BRITISH COLUMBIA THROUGH TO 2020



more productive in the workplace earlier in their apprenticeship years. We will continue to work with industries and employers to find out when they are busy and when they have down time, so that apprentices are at the job site when there is work and in the classroom when there is not. This includes focusing more classroom training at the beginning

of apprenticeships where appropriate.

We presented our draft skills and training plan and consulted closely with groups that include the BC Business Council, Industry Training Organizations (ITOs), the Industry Training Authority and the Trades Training Consortium of B.C. They told us we are on



Hourly wages within 2 years of graduation



Source: 2011 Apprenticeship Student Outcomes Survey: Report of Findings

Note:

- Based on response from former students who completed the final year of their apprenticeship program at a B.C. post-secondary institution between July 1, 2009 and June 30, 2010.
- The wages above are medians; the occupation groups are at the NOC 3 digit level.
- The occupations shown are the top ten, accounting for 94 per cent of employed respondents.

the right track to deal with a key issue — **changing our system to make it even more flexible and responsive to employers' needs.** They reinforced that the focus must include **coaching supports — to improve completion rates and increase training and apprentice uptake by small and medium-sized enterprises.** And, they told us they are concerned about the **amount of time apprentices spend away from the workplace during the classroom training component, and maintaining high quality training standards.**

We have also engaged British Columbians through the Immigration Task Force, which undertook eight regional consultations earlier this year. This work confirmed that the current immigration system (levels and skills mix) does not support the economic needs of the Province, and that we need an immigration system that responds to the short as well as long term needs for workers, especially in our regions.

Our post-secondary institutions are prepared to make the changes necessary to get British Columbians ready for a changing economy and flexible in the face of ongoing change. **Our northern colleges will work to align the seats they offer with the trades and technical needs of local industries.** This may mean fewer welding seats in Terrace but more in Fort St. John, more construction seats in Kitimat but fewer in Dawson Creek. **We will need to work together to support changes that align training with job opportunities.** This plan is about changing the face of our training programs within our existing and generous budget commitments. **Funding is not changing, but programming must.**

Our government's changes allowing colleges to offer degrees and the creation of teaching universities has provided access and new opportunities across the province. Now is the time to focus on skilled trades programs in areas where they are needed.

Our plan relies on more extensive use of our Centres of Excellence to focus on increasing partnerships between industry and institutions, create an interaction with students and industry, and find creative solutions to workforce challenges through sharing of expertise and coordinated training. Our plan will ensure that training provided by our colleges meets the needs of industry and employers. **Our plan will make it more affordable to pursue**

training in high-demand, high-cost occupations. And, working with industry, it will aim to reduce the time required to achieve certification for trades and technical training while maintaining high standards.

Our government is making the most of our world-class system of education and training, offering seamless learning opportunities from K – 12 through post-secondary and apprenticeships and ultimately into the workplace. We are taking steps to better use government's existing investments and leverage industry partnerships. We are working to help people get the skills they need and ensure they are job-ready and available to enter the workforce sooner. We are putting modern equipment in our post-secondary institutions, and offering enhanced programs and services to connect more job seekers with job openings, support apprentices

and their employers, and help workers looking to upgrade their skills to move into new careers. And because we know that even after we are 100 per cent successful with workers and students in British Columbia, we will still face a worker shortage, we will work to increase the number of skilled workers coming from other provinces and countries to fill jobs critical to further economic growth.

At the same time, we are working to raise the profile of the trades and fuel a passion for craftsmanship in British Columbia, to entice new generations of students and under-represented groups such as women, immigrants, and Aboriginal people by helping them to see the personal and financial benefits of careers in the trades and take advantage of the training that is available.



Our plan for a more effective skills and training system in British Columbia is built on four key areas of action:

- 1. Today's training is tomorrow's careers – promote dynamic opportunities in trades and technical fields and improve policies that support these choices.*
 - 2. Invest in and improve our training facilities and equipment, and ensure the availability of technical education teachers, particularly with trades certification.*
 - 3. Get the right mix and quality of trades and technical programs and accelerating completion times and rates while maintaining the high standards required by industry.*
 - 4. Align economic immigration selection to British Columbia's labour market needs.*
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Today's training is tomorrow's careers – promote dynamic opportunities in trades and technical fields and improve policies that support these choices.

Through our consultations with stakeholders and experts' own experiences administering training programs, we know that students must be better informed about the trades. There are perceptions about the status, pay and hours of work in occupations in the trades that are out of date and unrealistic.

We also know there is frequently a bias towards post-secondary degrees and professions, rather than the trades.

Career-related curriculum has become out of date and we also face the challenge of limited dual credit opportunities — where credits earned towards high school graduation can also be applied towards post-secondary and industry certification.

To deal with these challenges, **our government has developed an integrated plan to create multiple pathways to graduation and career preparation. We have set a target for the K-12 sector to increase by 50 per cent the number of graduates proceeding immediately from high school to a trades or technical program.** We will pursue this target by making students better aware of the opportunities available in various sectors, allow them to form a clear career goal and help them map out how to achieve that goal as quickly as possible.

One of the most important ways we can accelerate transition to the workforce is to **expand the opportunities for students to begin apprenticeships before graduation and earn graduation credits that can also be applied to the completion of a trades or technical program.** This will require closer coordination between the K-12 sector, post-secondary institutions and industry.

Not only will this help more people to enter the workforce at a younger age, it will also help our schools to retain students at risk of leaving early. For many students, providing alternatives to the traditional, linear pathway to school completion will keep them engaged and on track to complete high school.

Part of our efforts to celebrate the trades in British Columbia will be a dedicated initiative to elevate the profile of trades careers. It will target youth, educators and employers to increase their knowledge about opportunities available in the trades. And it will recognize employers who support apprentices through their journey.

We are improving school district capacity to market and promote trades and technical programs. We will ensure sufficient emphasis is placed on trades and technical options in the K-12 system and in post-secondary career counselling services. And we are providing districts with new flexibility to apply provincial funding for scholarships and awards to encourage student participation in trades and technical training.

Our government will work with school districts to set clear targets and accountabilities for increased trades enrolment and expanded partnerships with industry and post-secondary institutions. We will also continue initiatives to ensure that Aboriginal people are able to take advantage of opportunities that exist in trades and technical occupations.

2

Invest in and improve our training facilities and equipment, and ensure the availability of technical education teachers, particularly with trades certification.

Our government has made significant capital investments over the past decade. As needs change and technology evolves, we continue to have some facilities and equipment that in some cases are out of date, and in other cases are mismatched to market needs.

An additional challenge is posed by the higher operating costs of applied and technical courses, which influence the course offerings of colleges. There can be a lack of dedicated vocational counselling resources, and shortages of technical education teachers, particularly with trades certification.

To meet these challenges head on, we will extend partnerships between post-secondary institutions

and industry through shared facilities, equipment and staff. We will also ensure the availability of teachers delivering trades and technical training, and help school districts coordinate regional sessions to review labour needs and opportunities.

We are addressing equipment and facility needs for trades and technical training through our existing capital envelope. We will be seeking partnerships with industry and others to ensure students have access to new, advanced technologies and equipment already available on worksites.

And we are making significant investments in our institutions to ensure future carpenters, heavy duty mechanics, shipbuilders and other skilled workers get the training they need.

3

Get the right mix and quality of trades and technical programs and accelerating completion times and rates while maintaining the high standards required by industry.

Our government is taking steps to ensure we are among the world's leading trades training jurisdictions – with the right mix and quality of trades and technical programs in relation to industry demand — while also accounting for what we know will be a shortage in professional and managerial positions.

It is important that our training system be responsive to the needs of the economy it is supporting. This means being more flexible in our trades and technical course offerings, as regional demand shifts, and making it easier for people to complete their training faster.

We need to ensure that we're aligning capacity, particularly in the northern region, with the rapidly increasing demand for workers. **We will ensure program dollars are matched to regional needs, and thereby ensure the right seats are available in right places.** The solution does not lie in increasing funding, but instead being smarter about how the funding is aligned: ensuring it is correctly matched to labour market needs.

Starting this year, our government will more extensively utilize our sector-based Centres of Training Excellence. We will build on existing centres for mining, oil and gas and shipbuilding, creating hubs to further leverage our partnerships with industry.

Starting in 2013/14, we will offer student financial aid support, for specific, targeted in-demand trades and technical skills programs, to encourage students to pursue this training.

To ensure we are always up to date with labour market needs, **our government will encourage major project proponents to submit workforce needs to government.** This information will help WorkBC employment centres and sector organizations to connect local unemployed persons with jobs on these projects, and help government and industry to plan for and target training investments.

Our government is committed to introducing more unemployed people, particular under-represented demographic groups, to trades careers. Our goal

is to support up to 500 more workers by 2014, increasing capacity by 25 per cent. We will also support the up-skilling of workers for jobs in growth sectors. **Training funding will be increased by \$5 million per year starting in 2013/14 to enable workers to take on higher skill/higher pay work, and help sectors address specific skill needs.** Both of these efforts will be funded through the Canada-BC Labour Market Agreement.

Our government will also advance efforts to partner with industry to provide coaching supports to apprentices and employers. **Beginning in mid-2013, Industry Training Authority and Industry Training Organizations will introduce 15 regionally dispersed coaches and improve on-line resources.** This work is supported by studies from Australia and elsewhere that suggest coaching supports contribute to improved completion rates.

With our partners, **we will pilot an approach that improves timelines and outcomes in specific high priority trades, using the lessons learned from other countries.**

Our plan includes work to credential more skilled workers by developing competency-based skills assessment tools and providing "gap" training. **Between now and 2014, we will develop tools for 10 high-priority trades, and assess and certify up to 300 workers, of which up to 200 may receive short courses to address specific skill deficiencies.** This work will also support domestic and offshore recruitment.

Our plan looks to use a number of strategies to help students get the vocational training needed up front before they reach the worksite. This makes these workers more job-ready when they start their apprenticeships, reducing the amount of time spent away from work. Our plan also includes more flexible training delivery options, including scheduling classes on job sites or during off-peak hours, and greater use of technological solutions.

With phased implementation, beginning with priority trades in 2013/14, we will work with industry to front-end-load training, to increase the continuation of pre-apprentice program graduates into apprenticeship and the productivity of new apprentices. We will also begin consulting with stakeholders on ways to reduce the overall length of time from initiation of training to obtainment of a trades certificate, with a goal of reducing it by up to 50 per cent in priority trades while maintaining the high standards industry requires.

Our plan also includes more flexible training delivery options, including scheduling classes on job sites or during off-peak hours, and using on-line training delivery where appropriate. This summer saw the launch of our Job Match pilot project to connect unemployed British Columbians to construction job openings in the north. By December 2012, the program will have provided assistance to approximately 250 workers with an investment of up to \$2.9 million. **The results of the Job Match pilot will inform possible province-wide expansion of the program in 2013, supporting additional workers.**



Align economic immigration selection to British Columbia's labour market needs.

Currently, the federal government controls immigrant levels and has placed an annual cap of 3,500 on economic immigrants under the Provincial Nominee Program. The number of economic immigrants to British Columbia is trending down, and immigrants selected by the federal government do not come with the skills that are urgently required by employers across the province. The number of international students in the trades and technical training should be higher to help meet our labour market needs.

While we do all we can to ensure British Columbians are first in line for the opportunities being created in our economy, our government will redouble efforts to recruit workers from other parts of Canada and internationally to help fill our coming skills gap.

To improve our work with industry to address needs in high unemployment areas by recruiting workers

from other provinces, there will be up to six industry-led recruitment missions and improved marketing efforts.

To improve our recruitment of trades and technical workers from other countries, **we are committing to three international recruitment missions for 2012/13 for high-demand occupations and to engage employers in retaining international workers with key skills through our Provincial Nominee Program.**

And to attract more international students to our trades and technical programs, we are targeting 500 new students by 2015. We will work with our federal counterparts to improve study and work permit policies, and broaden mechanisms for international students to settle permanently in B.C. post-graduation.

Our government's investments in post-secondary education are significant and well-calibrated. Within those generous programs, we will do a better job to support opportunities for people to pursue training in the trades and technical professions.

And we will continue to press the federal government to increase the Provincial Nominee Program levels, and make the immigration system more responsive to employers' needs for trades workers.

This is our plan to improve skills and technical training in British Columbia. It builds on a decade of capital investment, an excellent K-12 education system, and a world class post-secondary sector. It is innovative, and reflects best practices from other jurisdictions. It will require a steady hand to implement new policies that will change how we are doing things now.

Our plan has clear targets, and we will include reporting on its progress in our bi-annual reporting on the B.C. Jobs Plan.





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